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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert W. Turner

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EXAMINER

MOTSINGER, SEAN T

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

08/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/721,212	Applicant(s) TURNER ET AL.	
	Examiner SEAN MOTSINGER	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,5,6,8,18,20-24,38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,6,8,18,20-24,38 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Applicants Arguments/Amendments

Applicants arguments/amendments filed on 10721212 have been entered and made of record.

Applicants arguments filed on with regard to the prior art have been fully considered but are not persuasive. Applicant argues that Lindgren does not disclose "landmarks" this argument is rendered moot by the new combination. Applicant further argues that Fraisse does not disclose an approach for making the transient information temporal coherent. The examiner disagrees Fraise uses the transient information to of the column 7 lines 1-20 to perform atmospheric correction to make the image temporally coherent.

Rejections Under 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 and 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 depends from claim 1 which has been cancelled the examiner has interpreted this claim to depend from claim 39. Furthermore claim 8 and 24 state that "the resolution level of the set is the highest of the various

Art Unit: 2624

resolution levels". This makes no sense since there are images of lower resolution. The examiner interprets the claim to read "the resolution level of the set is equalized to the highest of the various resolution levels"

Rejections Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38 and 39, 2, rejected under 35 U.S.C. 103(a) as being unpatentable over Lindgren US 6,097,835 in view of Fraisse et al US 7,171,912 in further view of Lee et al US 5,995,681.

Re claim 38 Lindgren discloses A method comprising: obtaining a series of images of a geographical location that were captured by different aerospace sensor platforms (column 1 lines 5-35 different sensors are used to capture multi-spectral and panchromatic bands), the platforms having different resolutions and sensor performance characteristics (column 1 lines 5-35 some bands are multi-spectral and some are pan chromatic figure 3);processing the images to produce an integrated image set including: Identifying and using control points (column 4 lines 20-25) using a

Art Unit: 2624

computer and the control points in the images to align and correct the images (column 4 lines 20-50). Fraisse discloses correcting the images so that frame to frame unit data comparisons are geographically accurate and that transient information in the images is temporally and radio metrically coherent (column 7 lines 1-20 note the images are corrected for solar, angle azimuth angle excreta for each band this will correct radiometric and temporal inconsistencies). It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the atmospheric correction of Fraisse with the pan sharpening method of Lindgren to increase the image resolution as taught by Fraisse at column 7 lines 19-22.

Lindgren and Fraisse disclose the elements of base claims 1 and 2. Lindgren and Fraisse do not explicitly disclose setting a plurality of control points in the images based on landmark information and aligning the images based on the set control points. Lee discloses identifying a stationary geographical landmark (points whose geographical coordinates are known with a relatively high degree of accuracy column 1 lines) having a known geographical location and using the land mark as a control point in the images (column 1 lines 55-65). It would have been obvious to one of ordinary skill in this art at the time of this invention to align the panchromatic and multispectral images of Lindgren using the control points obtained from a survey or reference image of the geographical area of interest in order to co-register the images as taught by Lee in columns 1-2 and figure 1.

Art Unit: 2624

Re claim 2, Lindgren discloses equalizing the resolution levels in the images and the means for equalizing the resolution levels (see column 3 lines 40-45).

Re claim 8 lindgren discloses wherein the series of images are multispectral band images that are sampled at various first resolution levels and the resolution level of the image set is equalized to the highest of various resolution levels (column 4 lines 65-67).

Re claims 39, claim 39 is a computer with corresponding software to perform the method of claim 38 and is rejecte for similar reasons.

Re claim 24 claim 24 contains elements which substantially correspond to claim 8 and is rejected for the same reasons.

Re claim 20 Lee discloses wherein the computer is programmed to display a user interface device for selecting landmark location information from a data base (column 1 lines 55-65).

Re claim 21 Lee discloses wherein the user interface can also select a control points on a visual feature of the landmark.

Art Unit: 2624

Re claim 23 Lindgren wherein the obtained images include multi-spectral satellite images of different resolution levels and wherein the computer is further programmed to set the images to equalized resolution levels as shown in Figure 4.

Claims 5, 6 18 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Lindgren in view of Fraisse et al and Lee et al in further view of Ogawa et al Us 5,864,632

For claims 5-6 Lindgren Fraisse and Lee discloses the elements of claim 38, they do not expressly disclose wherein the landmark is a school., Ogawa in figure 7 shows the landmarks include a building and a field. Given the fact that the neither the claims nor the specification establishes a critical distinction between a building and a school building, or a field and a football field, one of ordinary skill in the art would obviously recognize that the building of Ogawa can be a school building and the field can be a football field. It would have been obvious to one of ordinary skill in this art at the time of invention to set control points in the images of Lindgren, Fraisse and Lee adjacent to selected landmarks as shown by Ogawa for the purpose of aligning multiple images of the same geographic location as taught by Ogawa at column 5 lines 33-36.

Re claims 18 and 22 claim 18 and 22 corresponds to claims 5 and 6 and are rejected for similar reasons.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN MOTSINGER whose telephone number is (571)270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bhavesh M Mehta/
Supervisory Patent Examiner, Art Unit 2624

Motsinger
7/30/2009

Application/Control Number: 10/721,212
Art Unit: 2624

Page 9